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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/797,266 | 03/10/2004 | Yu Deng | 200314604-1 | 5355 |

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| EXAMINER | |
|---|---|
| PONIKIEWSKI, TOMASZ | |
| **ART UNIT** | **PAPER NUMBER** |
| 2165 | |

| NOTIFICATION DATE | DELIVERY MODE |
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| 01/03/2008 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/797,266 | DENG ET AL. | |
| | Examiner | Art Unit | |
| | Tomasz Ponikiewski | 2165 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *26 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *1-10 and 21-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. In view of the Appeal Brief filed on September 26, 2007, PROSECUTION IS HEREBY REOPENED. *A new ground of rejection is* set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 1-25 are pending of which claims 1-10 and 21-25 are withdrawn from consideration. Therefore claim1 11-20 are pending.

### *Specification*

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claims 18-20 recite "computer readable medium". The disclosure does not appear to contain the phrase.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11-12, 15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spring (US 6,549,943 B1) in view of Schmit et al (2003/0233365 A1).

As per claims 11 and 18 Spring is directed to a method and a computer readable medium, comprising:

generating a node to represent a functional relationship between one or more objects (column 7, lines 57-59, wherein "generating" means "constructing" and wherein "expression" represents "functional relationship")

associating an expression of the functional relationship to the node (column 7, lines 57-59); and

associating one or more parameters of the functional relationship to the node (column 26, lines 7-13).

Spring does not teach distinct ontologies in a metadata system.

Schmit et al et al teaches of distinct ontologies in a metadata system (Schmit et al, page 3. paragraph 0037, lines 32-33; wherein "ontologies" could mean "various metadata sources").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Spring by teachings of Schmit et al to include distinct ontologies in a metadata system because information taken from different sources could result in useful information to the user (Schmit et al, page 1, paragraph 0007, lines 17-22).

As per claims 12 and 19 Spring as modified is directed to further comprising associating a dependency chain representing the dependent relationships between properties of a parameter path associated with the one or more parameters of the functional relationship (Spring, column 7, lines 60-62).

As per claim 15 Spring as modified still does not teach identifying mappings between dependency chains spanning the distinct ontologies.

Schmit et al does teach identifying mappings between dependency chains spanning the distinct ontologies (Schmit et al, page 1, paragraph 0009, lines 3-8; wherein "mapping" is inherent feature of "integrating" and "distinct ontologies" are interpreted as "disparate data sources")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Spring by teachings of Schmit et al to include identifying mappings between dependency chains spanning the distinct ontologies because integration and aggregation of data from multiple sources needs to be mapped for the information to be accurate and useful.

As per claim 17 Spring as modified still does not teach maintaining the mappings that span the distinct ontologies when one of the distinct ontologies is modified.

Schmit et al does teach maintaining the mappings that span the distinct ontologies when one of the distinct ontologies is modified (Schmit et al, page 1, paragraph 0008, lines 28-34)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Spring by teachings of Schmit et al to include maintaining the mappings that span the distinct ontologies when one of the distinct ontologies is modified because as long as the data in plurality of sources is computational or stored as bytes of information then the data in plurality of sources can be modified and still be useful to the user.

5. Claims 13-14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spring (US 6,549,943 B1) in view of Schmit et al (2003/0233365 A1) and further in view of Heh (US 2002/0156788 A1).

As per claim 13 the combination of Spring and Schmit et al does not teach associating one or more parameters comprises generating a resource that aggregates a local name, type, and dependency chain.

Heh teaches associating one or more parameters comprises generating a resource that aggregates a local name, type, and dependency chain (Heh, abstract, lines 4-7).

It would have been obvious to one in of ordinary skill in the art at the time the invention was made to modify combination of Spring and Schmit et al by teachings of Heh to include associating one or more parameters comprises generating a resource that aggregates a local name, type, and dependency chain because its more efficient to store numerous data under one reference (Heh, page 1, paragraph 0003).

As per claim 14 the combination of Spring and Schmit et al does not teach associating one or more parameters comprises generating a resource that aggregates a type and a dependency chain and that is associated to a name through an explicit mapping.

Heh teaches associating one or more parameters comprises generating a resource that aggregates a type and a dependency chain and that is associated to a name through an explicit mapping (Heh, page 1, paragraph 0008).

It would have been obvious to one in of ordinary skill in the art at the time the invention was made to modify combination of Spring and Schmit et al by teachings of Heh to include associating one or more parameters comprises generating a resource that aggregates a type and a dependency chain and that is associated to a name through an explicit mapping because more efficient to store numerous data under one reference.

As per claim 20 the combination of Spring and Schmit et al does not teach the program further causes the processor to connect one or more parameters comprising generating a blank node that aggregates a local name, type, and dependency chain.

Heh teaches the program further causes the processor to connect one or more parameters comprising generating a blank node that aggregates a local name, type, and dependency chain. (Heh, page 1, paragraph 0008; Heh, page 1, paragraph 0009).

It would have been obvious to one in of ordinary skill in the art at the time the invention was made to modify the combination of Spring and Schmit et al by teachings of Heh to include the program further causes the processor to connect one or more parameters comprising generating a blank node that aggregates a local name, type, and dependency chain because more efficient to store numerous data under one reference.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spring (US 6,549,943 B1) in view of Schmit et al (2003/0233365 A1) and further in view of Heh (US 2002/0156788 A1) and further in view of Kalavade et al. (US 5,961,599).

As per claim 16 the combination of Spring , Schmit et al and Heh does not teach the identifying further comprises utilizing heuristics for suggestions of alternative mappings between dependency chains.

Kalavade et al. teaches the identifying further comprises utilizing heuristics for suggestions of alternative mappings between dependency chains (Kalavade et al., column 11, lines 55-59).

It would have been obvious to one in of ordinary skill in the art at the time the invention was made to modify the combination of Spring, Schmit et al and Heh by teachings of Kalavade et al. to include the identifying further comprises utilizing heuristics for suggestions of alternative mappings between dependency chains because heuristics is a well known method in the art to determine similarities.

### *Response to Arguments*

7. Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571) 272-1721. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on (571)272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tomasz Ponikiewski
December 20, 2007

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SUPERVISORY PATENT EXAMINER
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